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April 2, 2004

CERTIFICATE OF MAILING 37 C.F.R. 1.8

I certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Attn.: Shanon A. Foley, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

April 2, 2004

Date

Michael R. Krawzsenek

Attn.: Shanon A. Foley
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

RE: *U.S. Patent Application No. 09/203,078 entitled "AN IMPROVED METHOD FOR THE PRODUCTION AND PURIFICATION OF ADENOVIRAL VECTORS" – Shuyuan Zhang et al.*
Our reference: INRP:081

Sir:

Enclosed for filing in the above-referenced patent application is a Supplemental Information Disclosure Statement, Form PTO-1449, and references A5-A13, B9-B23 and C104-C124.

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski L.L.P. Account No.: 50-1212/INRP:081.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Michael R. Krawzsenek
Reg. No. 51,898

MRK/kmv
Encl.: as noted
25395880.1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Re Application of:
Shuyuan Zhang et al.

Serial No.: 09/203,078

Filed: December 1, 1998

For: AN IMPROVED METHOD FOR THE
PRODUCTION AND PURIFICATION OF
ADENOVIRAL VECTORS

Group Art Unit: 1648

Examiner: Shanon A. Foley

Atty. Dkt. No.: INRP:081

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April 2, 2004

Date

Michael R. Krawzsenek
Michael R. Krawzsenek

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Attn.: Shanon A. Foley
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner. We were unable to obtain a copy of reference C125, Kotani, "Serum-free production of adenoviral vectors for gene therapy," Williamsburg BioProcessing Conference, Nov. 18-21, 1996. However, this reference remains on the Form PTO-1449 out of an abundance

of copies
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In accordance with 37 C.F.R. §§ 1.97(g) and (h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Account No.: 50-1212/INRP:081.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



Michael R. Krawzsenek
Reg. No. 51,898
Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P.
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Date: April 2, 2004

Form PTO-1449 (modified)

Atty. Docket No.

INRP:081US

Serial No.

09/203,078

List of Patents and Publications for Applicant's

Applicant

Shuyuan Zhang *et al.*

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:

December 1, 1998

Group:

1648

U.S. Patent Documents

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Foreign Patent Documents

See Page 1

Other Art

See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A5	4,725,547	2/16/88	Sakamoto <i>et al.</i>	435	239	8/9/85
	A6	4,797,368	1/10/89	Carter <i>et al.</i>	435	320	3/15/85
	A7	5,139,941	8/18/92	Muzycka <i>et al.</i>	435	172.3	10/25/91
	A8	5,552,309	9/3/96	March	435	172.3	9/30/94
	A9	5,607,851	3/4/97	Pellegrini <i>et al.</i>	435	236	7/18/94
	A10	5,744,304	4/28/98	Munford	435	6	5/30/95
	A11	5,789,244	8/4/98	Heidrum <i>et al.</i>	435	320.1	1/8/96
	A12	5,837,520	11/17/98	Shabram <i>et al.</i>	435	239	3/07/95
	A13	6,194,210	2/27/01	Leu and Seifert	435	403	4/17/96

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B9	1279843	11/10/89	Japan			ABSTRACT
	B10	4-9338	1/14/92	Japan			ABSTRACT
	B11	EP 0475623	3/18/92	Europe			
	B12	WO 00/34444	6/15/00	PCT			
	B13	WO 93/18790	9/30/93	PCT			
	B14	WO 93/25224	12/23/93	PCT			
	B15	WO 94/06910	3/31/94	PCT			
	B16	WO 95/10601	4/20/95	PCT			
	B17	WO 95/19427	7/20/95	PCT			
	B18	WO 95/25789	9/28/95	PCT			
	B19	WO 96/32116	10/17/96	PCT			

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EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

INRP:081US

09/203,078

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U.S. Patent Documents

See Page 1

Foreign Patent Documents

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Other Art

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Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B20	WO 97/04803	2/13/97	PCT			
	B21	WO 98/35554	8/20/98	PCT			
	B22	WO 99/12568	3/18/99	PCT			
	B23	WO 99/41416	8/19/99	PCT			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C104	Cartwright, "Fermenter design for animal cell cultures," Animal Cells as Bioreactors, Cambridge University Press, 58-63, 1994.
	C105	Carver <i>et al.</i> , "Transgenic livestock as bioreactors: stable expression of human alpha-1-antitrypsin by a flock of sheep," <i>Biotechnology NY</i> , 11:1263-1270, 1993.
	C106	Corveleyn and Remon, "Maltodextrins as lyoprotectants in the lyophilization of a model protein, LDH," <i>Pharm. Res.</i> , 13:146-150, 1996.
	C107	Croyle <i>et al.</i> , "Factors that influence stability of recombinant adenoviral preparations for human gene therapy," <i>Pharm. Dev. Technol.</i> , 3(3):373-383, 1998.
	C108	Fried and Bromberg, "Factors that affect the stability of protein-DNA complexes during gel electrophoresis," <i>Electrophoresis</i> , 18:6-11, 1997.
	C109	Hall <i>et al.</i> , "Stabilizing effect of sucrose against irreversible denaturation of rabbit muscle lactate dehydrogenase," <i>Biophys. Chem.</i> , 57:47-54, 1995.
	C110	Herman <i>et al.</i> , "The effect of bulking agent on the solid-state stability of freeze-dried methylprednisolone sodium succinate," <i>Pharm. Res.</i> , 11:1467-1473, 1994.
	C111	Kotani <i>et al.</i> , "Improved methods of retroviral vector transduction and production for gene therapy," <i>Human Gene Therapy</i> , 5:19-28, 1994
	C112	Lentfer and Conde, "A rapid and inexpensive procedure for the purification of adenovirions," <i>Archives of Virology</i> , 56:189-193, 1978.
	C113	Lu <i>et al.</i> , "Coat protein interactions involved in tobacco mosaic tobamovirus cross-protection," <i>Virology</i> , 248:188-198, 1998.

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Form PTO-1449 (modified)		Atty. Docket No. INRP:081US	Serial No. 09/203,078
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant Shuyuan Zhang <i>et al.</i>	
		Filing Date: December 1, 1998	Group: 1648
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C114	Lueckel <i>et al.</i> , "Formulations of sugars with amino acids or mannitol--influence of concentration ratio on the properties of the freeze-concentrate and the lyophilizate," <i>Pharm. Dev. Technol.</i> , 3:326-336, 1998.
	C115	Montagnon, "Polio and rabies vaccines produced in continuous cell lines: a reality for vero cell line," <i>Develop. Biol. Standard.</i> , 70:27-47, 1989.
	C116	Mori <i>et al.</i> , "Frequent somatic mutation of the <i>MTS1/CDK4I</i> (Multiple Tumor suppressor/Cyclin dependent Kinase 4 Inhibitor) gene in esophageal squamous cell carcinoma," <i>Cancer Res.</i> , 54:3396-3397, 1994.
	C117	Nadeau <i>et al.</i> , <i>Biotechnology and Bioengineering</i> , 51:613-623, 1996.
	C118	Payment <i>et al.</i> , In: <i>Biotechnology Current Progress</i> , ed. P.N. Cheremisinoff <i>et al.</i> , Technomic Publishing, 1991.
	C119	Racher <i>et al.</i> , "Culture of 293 cells in different culture systems: cell growth and recombinant adenovirus production," <i>Biotechnology Techniques</i> , 9:169-174, 1995.
	C120	Sagrera <i>et al.</i> , "Study of the influence of salt concentration on Newcastle disease virus matrix protein aggregation," <i>Biochem. Mol. Biol. Int.</i> , 46:429-435, 1998.
	C121	Trepanier <i>et al.</i> , <i>Journal of Virological Methods</i> , 3:201-211, 1981.
	C122	Vanlandschoot <i>et al.</i> , "pH-dependent aggregation and secretion of soluble monomeric influenza hemagglutinin," <i>Arch. Virol.</i> , 143:227-239, 1998.
	C123	Vossen and Fried, "Sequestration stabilizes lac repressor-DNA complexes during gel electrophoresis," <i>Anal. Biochem.</i> , 245:85-92, 1997.
	C124	Wills and Menzel, "Adenovirus Vectors for Gene Therapy of Cancer," <i>J. of Cellular Biochem.</i> , Suppl: 17E, S216:206, 1993.
	C125	Kotani, "Serum-free production of adenoviral vectors for gene therapy," Williamsburg BioProcessing Conference, Nov. 18-21, 1996.

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